CLAIMS:

1. A bone cement plug for fitting into the intramedullary canal within a bone to restrict flow of bone cement during surgery, which comprises:

a. a sleeve whose wall is circumferentially continuous and has an outer surface for contacting the wall of the canal, and whose inner surfaces define an internal cavity and the longitudinal axis of the sleeve, the sleeve being formed from a deformable material so that it can be expanded transversely to contact the surface of the canal,

b. an expander which can be drawn through the cavity in a direction generally along the axis of the sleeve, to cause the sleeve to expand transversely to contact the surface of the canal,

in which the inner surfaces of the wall converge towards the end of the sleeve towards which the expander is drawn to cause the sleeve to expand to contact the surface of the canal.

2. A bone cement plug as claimed in claim 1, in which the sleeve has an end wall at the end towards which the expander is drawn to cause the sleeve to expand.

3. A bone cement plug as claimed in claim 2, in which the end wall of the sleeve is formed as a single body with the wall of the sleeve which contacts the surface of the canal when the sleeve is expanded.

4. A bone cement plug as claimed in claim 2, in which the end wall of the sleeve has an opening extending through it, and in which the expander comprises a shaft which extends generally along the sleeve axis, and a transverse portion which contacts the internal wall of the cavity in the sleeve, the shaft extending through the opening in the end wall of the sleeve to that it can be engaged to draw the expander through the sleeve.

5. A bone cement plug as claimed in claim 4, in which the shaft has a line of weakness at which it can be broken to allow the transverse portion of the expander to be separated from that portion of the shaft which extends through the opening in the end wall of the sleeve.

6. A bone cement plug as claimed in claim 2, in which the expander includes a conical washer on the shaft which sits on the transverse portion of the expander.

7. A bone cement plug as claimed in claim 6, in which the conical washer has a plurality of radially slots formed in it, extending partially from the outside edge of the washer towards the inside edge thereof.

8. A bone cement plug as claimed in claim 4, in which the shaft and transverse portion of the expander are moulded as a single component.

9. A bone cement plug as claimed in claim 8, in which the shaft and the transverse portion of the expander are moulded from a resorbable material.

10. A bone cement plug as claimed in claim 1, in which the angle between the inner surface of the wall and the axis of the sleeve, at the end of the sleeve from which the expander is drawn through the cavity in a direction to cause the sleeve to expand transversely, is at least about 20°.

11. A bone cement plug as claimed in claim 1, in which the angle between the inner surface of the wall and the axis of the sleeve, at the end of the sleeve from which the expander is drawn through the cavity in a direction to cause the sleeve to expand transversely, is not more than about 50°.

12. A bone cement plug as claimed in claim 1, in which the outer surface of the sleeve has surface features to promote engagement with the bone surface of the intramedullary canal.

13. A bone cement plug as claimed in claim 1, in which the sleeve has at least one indent in the surface which defines the internal cavity, extending around the cavity approximately in a plane which is perpendicular to the axis of the sleeve.

14. A bone cement plug as claimed in claim 1, in which the hardness of the material of the sleeve is at least about 30 Shore A.

15. A bone cement plug as claimed in claim 1, in which the hardness of the material of the sleeve is not more than about 75 Shore A.

16. A bone cement plug as claimed in claim 1, in which the sleeve is formed from a resorbable material.

17. An assembly for use in orthopaedic surgery which comprises a bone cement plug as claimed in claim 1 and an instrument for locating the plug in the intramedullary canal within a bone.

18. An assembly as claimed in claim 17, in which the expander comprises a shaft which extends generally along the sleeve axis, and in which the instrument includes a socket for engaging the shaft on the expander.

19. An assembly as claimed in claim 17, which includes a drive unit by which the expander can be drawn into the sleeve to cause it to expand transversely.